John Woodman Higgins Armory



100 BARBER AVENUE

WORCESTER MASSACHUSETTS

May the 1st, 1936

Howland Wood, Esq.
c/o American Numismatic Society
Broadway and 156th Street
New York City

Dear Mr. Wood:

- IRON MEDALS -

I am interested in the use of iron for money and medals. My neighbor, Mr. Clifford S. Anderson (your university classmate) showed me his medal collection the other evening just before sailing for Europe and told me of his consultation with you. He advised me to see you and I went to New York for this purpose, but was unfortunate in choosing a time during your absence. I talked with your Assistant Curator, who showed me his modern Swedish, Norwegian, and Danish iron coins.

I was especially interested in the primitive iron "money" exhibited in your Museum. I did not, however, see anything like the coins that Mr. Anderson secured from you for his collection, namely, the Russian cast iron medals commemorative of some recent convention in Leningrad and which in sharpness and detail seem to approach the perfection of "Berlin iron" which I assumed was now practically a "lost art." Nor did I see anything like the German wrought iron commemorative medallions which Mr. Anderson said were coined from steel plate recovered from war submarines and battleships.

I would be very glad to secure one of these cast iron medals and one of these steel coined medallions for exhibition in this Steel Museum. These expressions of steel craftsmanship are appropriate and desirable for our educational purpose. I shall appreciate any information you can give me in this line, and if you can help me secure



STEEL PLANT OF THE WORCESTER PRESSED STEEL COMPANY, WORCESTER, MASS.

THE INDUSTRIAL MUSEUM

JOHN W. HIGGINS

President, Worcester Pressed Steel Company, Worcester, Massachusetts

VERY manufactory should have its own specialized museum. Just as the lawyer accumulates documents in his library, and the surgeon preserves specimens in his laboratory, so the manufacturer of buttons or dirigibles, employing one person or thousands, should assemble his collection of exhibits representing his industry, illustrating the service, and recording the history of his chosen specialty. Here he surrounds himself and his associates with that friendly atmosphere where creative ideas germinate. His reference file expands into a library, and his specimen case into a laboratory. No business can make progress without research nowadays.

Recognition of beauty and quality was one of the earliest manifestations differentiating man from beast, and even to-day human progress is jeopardized when machine operators ignore those first links. Every craftsman should exhibit his masterpiece in friendly surroundings, even though he starts with a soap-box in the corner of his shop, a sample-case in his office, or a pedestal in a Museum of Fine Arts. Some friend will recognize his demonstration of cultural advance, and

stimulate the next step. Pride established, challenged, or pricked, inspires progress in production engineering, as well as in the other arts.

The John Woodman Higgins Armory at the plant of the Worcester Pressed Steel Company at Worcester, Massachusetts, is a museum, library, and laboratory of pressed-steel products, from all places and all times, established with these purposes in view: to inspire steel-workers; to attract superior recruits; to stimulate Art in Industry; to extol steel craftsmanship; and to inform the public.

Here the worker sees the value of his own labor in the finished construction, and recognizes his relation to the onward march of industry. He compares his product with masterpieces of the past—his tools, his wages, and his comforts with those of his predecessors in this, his chosen craft. He senses the fun in his job. He catches the romance of tradition, the call of the present, and a vision of the future.

This steel collection is housed in its own unique steel and glass building adjoining the steel mills. One wing is devoted to modern products, headed by that crowning example of mass production—

Reprinted from Industrial Education Magazine, Peoria, Illinois, March, 1935.



The Modern Wing.

the modern automobile—ninety per cent PRESSED STEEL. Glass cases display various stamped, cold-forged, and deepdrawn steel parts for aeroplanes, radios, and innumerable other machines, as well as specimens of meteorites, iron ore, and raw steel. Dies and punches used in the mass production of millions of duplicate stampings are shown. Products of other steel-mills are freely displayed alongside the output of the home shops, and labels bear the manufacturers' names.

The Ancient Wing, devoted to the products of our predecessors, is dominated by a group of sixteenth-century armored knights mounted on chargers

ready for the joust, all in full steel panoply. Here are displayed many other superb masterpieces of the armorer's art, accepted by connoisseurs as examples of the fine arts and worthy of place among the approved masterpieces of the world's recognized painters and sculptors.

The entire main floor is devoted to products of the Steel Age, but inspection may begin in the gallery of the medieval wing, starting with utensils of the Stone Age and of the Bronze Age, including Greek and Roman armor, then passing to the war implements of the early Iron Age, and on to the crusaders' armor and the transitional weapons.



The Medieval Wing.

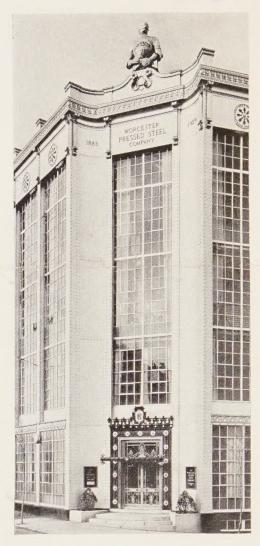
Schoolboys visit this museum, attracted first by these knights in steel armor, who stir their imagination. They stay to examine the steel stampings and dies in the Modern Wing, and ask admittance to the machine, press, and rolling mills adjoining. They cannot find a "Don't Touch" sign in the entire museum. One boy drew sketches; then he went home and made himself a suit of armor out of his mother's empty coffee-cans, utilizing a pudding-mold for the helmet. This boy is not yet a Bessemer nor a Carnegie; but he will always love steel, and he may choose this steel trade. We need new blood, and question why college graduates choose to peddle "commercial paper" in Wall Street, when the world's richest creative industry needs masters.

The guides and their thought-provoking labels showing comparative weights, strength, and costs, extol the use of pressed steel and the art of cold-rolling, drawing, stamping, and heat-treating strip steel. To restore zeal and pride of workmanship to the present-day machine worker, and to emphasize his rewards in recognition, self-respect, and satisfaction, are the motives behind this diversion.

The museum is connected by several stairways and elevator with the offices and the mills where current steel products are designed and made. These buildings comprise the active part of the exhibition, and are as open to visitors, as the museum galleries are open to the shop-workers. The doors are open free to the public from 7:00 a. m. to 6:00 p. m. daily, except Sundays and Holidays. That people are interested in such technicalities is demonstrated by the attendance of 10,000 visitors a year.

With scientific equipment, processes, and alloys beyond the wildest dreams of our predecessors, our fields of opportunity stretch farther ahead than their paths of history trail behind. In quality of material and workmanship our modern products stir our pride. We excel in accuracy, efficiency, uniformity, durability, lightness, and low cost in mass production. But from the viewpoint of artistic design we suffer in comparison to the masterpieces of our predecessors. Their ranking craftsmen were the great artists. If we have neglected that rare quality, beauty, we must look to the museums and art schools to popularize Art—to reinstate Art in Industry—to elevate consumer demand as well as producer zeal-to make all quantity products beautiful as well as Modern machines supplement rather than substitute manual skill, and our mass products should express the highest qualities of art and appropriate beauty.

We steel workers acknowledge steel to be man's medium par excellence. Its strength, abundance, dependability, and adaptability, its beauty of texture and tone, surpass all other materials for man's



A unique building of steel and glass, designed frankly for steel construction by Joseph D. Leland, architect, engineer, and artist, for the Worcester Pressed Steel Company, and covered only by a coat of aluminum paint.

supreme expression—Art. We are beginning to appreciate the value of nature's richest gift to man, after fire, water, and soil, and we accept the challenge of this age of steel.

"What cannot art and industry perform, When science plans the progress of their toil?" Mr. John W. Higgins, The John Woodman Higgins Armory, 100 Barber Ave., Worcester, Mass.

Dear Mr. Higgins:

I am very sorry that I was away when you were here and trust you will visit our Museum again. I am seldom here Thursdays and later on will be in the country Mondays.

I think my assistant gave you Kohler's name as being likely to have iron coins. A Stewart Mosher, now with Wayte Raymond, 580 Fifth Avenue, Room 2302, has been much interested in primitive African money and may be able to put you on to some of these African pieces as I think Mr. Robertson has already given you the name of Mr. Gibbs.

The Chinese and Japanese for many centuries have made money in iron, but only at times when their supply of copper was running low. Many of these are easy enough to get but at the present time we have no duplicates. I think I have some at home and if so will send you some of the Japanese. These, of course, were cast. I think I have heard it said that the Japanese were the first people to case iron, although I understand that parts of an iron bridge somewhere in Central Europe dates back many centuries.

Under separate cover I am sending you obverse and reverse of four Russian iron medals which we happen to have in duplicate and which formerly belonged to Dr. George F. Kunz. Two of these have evidently gotten wet and show it but you undoubtedly can fix these up. I am herewith enclosing bill for \$5.00 for these.

The Russians, for a century or so, have made some beautiful castings in iron, the equal, I understand, of the German work.

I am herewith sending you an application for membership in our Society. We have the Council meeting this Friday, which may be the last meeting until Autumn.

Mr. John W. Higgins, May 4, 1936

Offhand, I do not know of any coinage press available.

Possibly by writing to the Medallic Art Co., 210 W. 51st Street,
New York, you may secure one. Possibly Whitehead & Hoag, Newark,
N. J., may have an old one. You might write to Miss O'Reilly,
Office of the Director of the Mint, Washington, D. C., to see if
the Government might not have an old one that they could turn
over to your Museum.

Very truly yours,

Curator

HW ks ENCL.

May the 8th, 1936

Mr. Howland Wood, Curator
American Numismatic Society Museum
Broadway and 156th Street
New York City

Dear Mr. Wood:

- CAST IRON MONEY -

I appreciate your helpful letter of May 5th and especially your sending me these eight cast iron modern Russian medals - just what I want. I enclose \$5 check, per your invoice May 4th, and our sincerest thanks for presenting these interesting exhibits to this educational museum at this nominal rate. I was afraid that no more of these medals were available.

I am writing to these addresses you have given me and I hope to secure examples of cast iron Chinese and Japanese coins; steel coins of Norway, Sweden and Denmark issued just after the World War; German steel and iron medals; and primitive African iron money.

I hope you will keep my iron quest in mind and if you run across dealers or sources where I might secure such specimens, that you will let me know the name and address.

I am also interested in examples of "Berlin" cast iron and shall seek for specimens of the XIX Century Russian castings which you understand were equal to the Berlin. We want examples of fine craftsmanship and art expressions in non-ferrous metals.

I understand that the Chinese were the first craftsmen to cast iron - possibly in the Han Dynasty (206 B. C. - 220 A. D.) although cast iron was not used in Europe until the XIV Century. They needed it to replace their wooden cannons and stone cannon balls, and lost centuries of progress by this lack of knowledge. The Japanese were more skilled in forging steel in the Middle Ages and of course this developed their higher craftsmanship.

Your Russian iron medals are exceedingly interesting because they surpass anything we make in this country. I can pickle these two soiled medals perfectly

_ 2 and this will enable me to examine the naked iron which was camouflaged by the original finish. I am also writing to these addresses in my search for a coinage press for exhibition here. I plan to call on you again May 12th or 13th and get a little more information, dates, etc. about the primitive African iron money in your Museum. Also I am anxious to secure a medal like those German steel coined specimens that Mr. Clifford S. Anderson obtained from you - I believe they were patriotic souvenirs coined from some recovered battleship plate. Sincerely yours, JWH-1

Thanking you for your valuable assistance and hoping you will be able to help me secure a specimen

J Schulman, Keizergracht 448 amst. C - NITE.

Mr. John W. Higgins, The John Woodman Higgins Armory, 100 Barber Avenus, Worcester, Mass.

Dear Mr. Higgins:

The only place I know of today where you could get any of those German iron medals used during the war would be through J. Schulman, Keizergracht 448, Amsterdam C, Netherlands or Robert Ball, Wilhelmstrasse 44, Berlin W8, Germany.

You mentioned in one of your previous letters that you might like to apply for membe ship in the Society. The last meeting of the Council until fall will be held June 11th. If you can drop me a line of your intentions prior to them, I can propose your name.

Under separate cover I am sending or some cast from sen of Japan, minted in 1765 and 1825, which you can have with my compliments; also some of the from and zinc German pfennigs made during the war, and following.

We have no other iron medals in duplica s.

Very truly yours,

CURATOR

The John Woodman Higgins Armory WORCESTER MASSACHUSETTS 100 BARBER AVENUE June the 12th, 1936 Mr. Howland Wood, Curator American Numismatic Society Broadway and 156th Street New York City - IRON MEDALS -Dear Mr. Wood: Replying to your helpful letter of June 4th. Thank you. I shall write these Amsterdam and

Berlin dealers, hoping to get some iron medals.

I thank you highly for these twenty-one coins which I have just received. The Japanese cast iron sens of 1765 and 1825 are particularly interesting, as I have none of these. I appreciate your sending these with your compliments, but they could be kept on my account, possibly toward some future purchase.

I have noted the American Numismatic Society membership on my list for next year.

Thanking you, I remain

Yours sincerely.

JWH-1

John W. Higgins